



**IN THE UNITED STATES PATENT & TRADEMARK OFFICE**

Applicant: LIU et al.

Docket No: 16405-0013

Serial No: 09/827,056

Group Art Unit: 2811

Filing Date: April 3, 2001

Examiner: Tran, T.F.

For: **METHOD OF FABRICATING HIGH-COUPLING RATIO SPLIT GATE FLASH MEMORY CELL ARRAY**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**RESPONSE**

Sir:

Responsive to the Office Action mailed May 9, 2002, please amend the above identified application as follows.

**IN THE CLAIMS**

Please amend the claims as follows:

*B1*  
*A1*  
1. (Once amended) A method of fabricating a flash memory device including an array of split gate cells, comprising the steps of:

- 3        providing a silicon substrate having a top surface;
- 4        forming a common source region in an area of said top surface for each said cell;
- 5        implanting ions into predefined areas on opposite sides of each said common source region;
- 7        forming pair of floating gates associated with each said cell, each said floating gate having a substantial portion thereof overlying one of said predefined areas;
- 9        forming select gates each having a first extremity extending over at least a portion of one of said floating gates; and
- 11      forming a pair of drain regions associated with each said cell, each said drain region being positioned proximate a second extremity of one of said select gates;
- 13      whereby said step of implanting ions into each of said predefined areas adjusts the channel threshold voltage and provides a high coupling ratio for the associated flash cell.